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Amendment of 2 February 2004
Reply to Office Action of 1 October 2003

Amendments to the Claims

The following is a complete listing of the status of all claims that have been pending in this application. Please amend the claims as follows:

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1. (Currently Amended) A computer system for managing data exchanges among a plurality of network nodes in a managed packet network, comprising:

a managed packet backbone server (MPBS);

at least one Customer Premises Equipment (CPE) node communicable with the managed packet backbone server (MPBS); and

at least one Application Service Provider (ASP) node communicable with the managed packet backbone server (MPBS),

wherein

the managed packet backbone server (MPBS) manages transactions among said at least one Customer Premises Equipment (CPE) node and said at least one Application Service Provider (ASP) node including reserving resources in the managed packet network for communications among said at least one Customer Premises Equipment (CPE) node and said at least one Application Service Provider (ASP) node.

2. (Original) The computer system of claim 1 wherein the at least one Customer Premises Equipment (CPE) node registers with the managed packet backbone server (MPBS).

3. (Original) The computer system of claim 2 wherein the at least one Application Service Provider (ASP) node registers with the managed packet backbone server (MPBS).

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4. (Original) The computer system of claim 3 wherein the managed packet backbone server (MPBS) issues an authentication key to the at least one Customer Premises Equipment (CPE) node it registers.

5. (Original) The computer system of claim 3 wherein the managed packet backbone server (MPBS) issues an authentication key to the at least one Application Service Provider (ASP) node it registers.

6. (Original) The computer system of claim 4 wherein the managed packet backbone server (MPBS) stores profile information pertaining to the at least one Customer Premises Equipment (CPE) node it registers.

7. (Original) The computer system of claim 5 wherein the managed packet backbone server (MPBS) stores profile information pertaining to the at least one Application Service Provider (ASP) node it registers.

8. (Original) The computer system of claim 6 wherein a request from the at least one Customer Premises Equipment (CPE) node to establish a session with the at least one Application Service Provider (ASP) node is managed by the managed packet backbone server (MPBS).

9. (Original) The computer system of claim 6 wherein a request from the at least one Customer Premises Equipment (CPE) node to establish a session with another Customer Premises Equipment (CPE) node is managed by the managed packet backbone server (MPBS).

10. (Original) The computer system of claim 8 wherein when the managed packet

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backbone server (MPBS) receives a request from the at least one Customer
Premises Equipment (CPE) node to establish a session with the at least one
Application Service Provider (ASP) node, the managed packet backbone server
(MPBS):

 verifies that the Customer Premises Equipment (CPE) node has a valid
authentication key,

 sends a session request to the Application Service Provider (ASP) node,

 receives a session token from the Application Service Provider (ASP) node,
and

 sends the session token to the Customer Premises Equipment (CPE) node.

11. (Original) The computer system of claim 10 wherein one of the at least one
Customer Premises Equipment (CPE) nodes initiates a session with one of the at
least one Application Service Provider (ASP) nodes by sending a session request to
one of the at least one Application Service Provider (ASP) nodes including the
session token obtained from the managed packet backbone server (MPBS).

12. (Original) The computer system of claim 11 wherein one of the at least one
Application Service Provider (ASP) nodes verifies a received session token and
establishes a session with one of the at least one Customer Premises Equipment
(CPE) nodes if the session token is valid.

13. (Original) The computer system of claim 12 wherein one of the at least one
Customer Premises Equipment (CPE) nodes sends a session initiation event
message to the managed packet backbone server (MPBS) upon establishment of a
session with one of the at least one Application Service Provider (ASP) nodes.

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14. (Original) The computer system of claim 13 wherein one of the at least one Customer Premises Equipment (CPE) nodes sends a session termination event message to the managed packet backbone server (MPBS) upon termination of a session with one of the at least one Application Service Provider (ASP) nodes.

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15. (Original) The computer system of claim 14 wherein one of the at least one Customer Premises Equipment (CPE) nodes sends data pertaining to the number and type of data packets received during a session with one of the at least one Application Service Provider (ASP) node to the managed packet backbone server (MPBS).

16. (Original) The computer system of claim 15 wherein the managed packet backbone server (MPBS) calculates a fee based on the data pertaining to the number and type of data packets exchanged in a session.

17. (Original) The computer system of claim 16 wherein the managed packet backbone server (MPBS) bills an account associated with one of the at least one Customer Premises Equipment (CPE) nodes.

18. (Original) The computer system of claim 16 wherein the managed packet backbone server (MPBS) bills an account associated with one of the at least one the Application Service Provider (ASP) nodes for the session.

19. (Currently Amended) A managed packet backbone server (MPBS) for managing data exchanges among a plurality of network nodes in a managed packet network comprising:

    a registration component responsive to said plurality of network nodes in the

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managed packet network, for:

    receiving registration requests from the network nodes in the managed packet network;

    obtaining and storing profile information pertaining to each network node in the managed packet network; and

    providing an authentication key to each network node in the managed packet network; and

a session establishment component responsive to said plurality of network nodes in the managed packet network, for:

    receiving a session request message from a first network node in the managed packet network that wishes to establish a session with a second network node in the managed packet network, said session request message including the authentication key associated with the first network node;

    verifying the validity of the authentication key associated with the first network node;

    sending a session request message to the second network node;

    receiving a session token from the second network node; and

    sending the session token to the first network node, and

    reserving resources in the managed packet network for communications between the first network node and the second network node; and

a session reporting component responsive to said plurality of network nodes, for:

    receiving packet metering data pertaining to the amount and type of data exchanged over [[a]] the managed packet backbone-network during a session between two network nodes; and

    calculating a fee based on the packet metering data.

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20.   (Currently Amended) A Customer Premises Equipment (CPE) node of a

managed packet network comprising:

a registration component responsive to a managed packet network server node, for:

        sending a registration request to the managed packet network server

node; and

        receiving an authentication key from the managed packet network

server node, and

a session establishment component responsive to a server node, for:

        sending a session request message to the managed packet network

server node, said session request message including the authentication key

and the address of a managed packet network node that the Customer

Premises Equipment (CPE) node wishes to establish a session with;

        receiving a session token from the managed packet network server

node, said session token including indication of reserved resources in the

managed packet network for communications between the Customer

Premises Equipment (CPE) node and the managed packet network node that

the Customer Premises Equipment (CPE) node wishes to establish a session

with; and

        sending a session request message to the managed packet network

node that the Customer Premises Equipment (CPE) node wishes to establish

a session with, said session request message including the session token;

and

a session reporting component responsive to the managed packet network [[a]]

server node, for:

        sending data to the managed packet network server node pertaining to

the amount and type of data exchanged over the managed packet backbone

network during the session.

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21.   (Currently Amended) An Application Service Provider (ASP) node in a
managed packet network comprising:
a registration component responsive to a managed packet network server node, for:

      sending a registration request to [[a]] the managed packet network
server node; and

      receiving an authentication key from the managed packet network
server node, and

a session establishment component responsive to [[a]] the managed packet network
server node, for:

      sending a session token to the managed packet network server node; and

      receiving a session token from [[a]] the network node that wishes to establish

a session, said session token including indication of reserved resources in the
managed packet network for communications between the Customer Premises
Equipment (CPE) node and the managed packet network node that the Customer
Premises Equipment (CPE) node wishes to establish a session with.

22. (Cancelled)

23. (Cancelled)

24. (Currently Amended) A computer program product for managing data
exchanges among a plurality of network nodes in a managed packet network, the
computer program product having a medium with a computer program embodied
thereon, the computer program product comprising:

      computer program code for receiving registration requests from network
nodes in the managed packet network;

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computer program code for obtaining and storing profile information pertaining to each network node in the managed packet network;

computer program code for providing an authentication key to each network node in the managed packet network;

computer program code for receiving a session request message from a first network node in the managed packet network that wishes to establish a session with a second network node in the managed packet network, said session request message including the first network node's authentication key;

computer program code for verifying the validity of the first network node's authentication key;

computer program code for sending a session request message to the second network node;

computer program code for receiving a session token from the second network node;

computer program code for reserving resources in the managed packet network for establishing communication between the first network node and the second network node corresponding to the capabilities of the first network node and the second network node;

computer program code for sending the session token to the first network node;

computer program code for receiving packet metering data pertaining to the amount and type of data exchanged over [[a]] the managed packet backbone network during a session between two network nodes; and

computer program code for calculating a fee using the packet metering data.

25.   (Currently Amended) A computer program product for exchanging data among a plurality of network nodes in a managed packet network, the computer program

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product having a medium with a computer program embodied thereon, the computer program product comprising:

computer program code for sending a registration request from a first network node in the managed packet network to a managed packet network server node; and

computer program code for receiving in the first network node an authentication key from the managed packet network server node;

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computer program code for sending a session request message from the first network node to the managed packet network server node, said session request message including the authentication key and the address of a second network node in the managed packet network that the first network node wishes to establish a session with;

computer program code for receiving in the first network node a session token from the managed packet network server node;

computer program code for sending a session request message from the first network node to the second network node, said session request message including the session token; and

computer program code for sending, from the first network node, data to the managed packet network server for reserving resources in the managed packet network for establishing communication between the first network node and the second network node corresponding to the capabilities of the first network node and the second network node; and

computer program code for sending, from the first network node, data to the managed packet network server pertaining to the amount and type of data exchanged over the managed packet backbone network during the session.

26. (Currently Amended) A computer program product for exchanging data among a plurality of network nodes in a managed packet network, the computer program

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product having a medium with a computer program embodied thereon, the computer
program product comprising:

computer program code for sending a registration request to a server node in
a managed packet network;

computer program code for receiving an authentication key from the server
node;

computer program code for sending a session token to the server node; and

computer program code for receiving a session token from a network node in
the managed packet network that wishes to establish a session; and

computer program code for reserving resources in the managed packet
network for establishing communication for the network node in the managed packet
network that wishes to establish a session.

27. (Currently Amended) A method of managing data exchanges among a plurality
of network nodes in a managed packet network comprising:

registering network nodes connected to the managed packet network;

maintaining profile information pertaining to the network nodes connected to
the managed packet network;

providing an authentication key to the network nodes connected to the
managed packet network;

receiving session request messages from network nodes connected to the
managed packet network that wish to establish sessions with other network nodes
connected to the managed packet network; and

responding to session request messages from network nodes connected to
the managed packet network that wish to establish sessions with other network
nodes[[;]] by establishing sessions between network nodes connected to the
managed packet network that wish to establish sessions with other network nodes

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and reserving resources in the managed packet network for the session between the
network nodes.

28. (Currently Amended) The method of claim 27 further comprising:
receiving packet metering data pertaining to the amount and type of data
exchanged over [[a]] the managed packet backbone-network during a session
between two network nodes connected to the managed packet network; and
calculating a fee using the packet metering data.

29. (Currently Amended) A method of exchanging data between network nodes in a
managed packet network comprising:
sending a registration request to a managed packet network server node; and
receiving an authentication key from the managed packet network server node;
sending a session request message to the managed packet network server
node, said session request message including the authentication key and the
address of a network node connected to the managed packet network;
receiving a session token from the managed packet network server node;
sending a session request message, said session request message including
the session token; and
reserving resources in the managed packet network for the session between the
network nodes.

30.   (Currently Amended) The method of claim 29 further comprising:
sending data to the managed packet network server node pertaining to the amount
and type of data exchanged over the managed packet backbone-network during
the session.

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31.   (Currently Ameded) A method of exchanging data between network nodes
connected to a managed packet network comprising:

      sending a registration request to a managed packet network server node;

      receiving an authentication key from the managed packet network server node;

      sending session tokens to the managed packet network server node; and

      receiving session tokens from network node connected to the managed packet
network seeking to establish a session; and

      reserving resources in the managed packet network for the session between the
network nodes.

32. – 39. (Cancelled)

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